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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/619,971	07/15/2003	Nadeen B. Myers	41482-41410	7833
21888 7590 09/07/2007 THOMPSON COBURN, LLP ONE US BANK PLAZA SUITE 3500 ST LOUIS, MO 63101			EXAMINER PRATT, HELEN F	
			ART UNIT 1761	PAPER NUMBER
			MAIL DATE 09/07/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/619,971	Applicant(s) MYERS, NADEEN B.	
	Examiner Helen F. Pratt	Art Unit 1761	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 July 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 19-34 and 36-44 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 37-39 is/are allowed.
- 6) ☒ Claim(s) 19-34, 36, 40-44 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 19-34, 36, 40-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shigeru et al. (JP 402190169 A.) in view of Melachouris et al. (4,740,380).

Shigeru et al. disclose a process of making a calcium supplemented fluid composition by dissolving tricalcium phosphate (TCP) in citric acid. Sugar and spice were added to prepare a beverage. The calcium concentration in the composition was 25 mmol/liter. The pH is seen to have been within the claimed range as various acids were added. Claims 19-21, 34 differ from the reference in the use of tricalcium phosphate (TCP), and in whether the TCP citrate mixture of step a, is added to a liquid or whether the water was used in the admixture of citric acid and TSP and in the particular amount of the RDA. The reference discloses the use of tribasic calcium phosphate, which is heated to obtain tri-calcium alpha-phosphate and tetracalcium phosphate. However, Melachouris et al. disclose that it is known to dissolve calcium compounds in an acid at a pH from 3-3.5, and then the volume is adjusted to make a calcium containing solution as in step b. The reference discloses that the calcium compound can be tricalcium phosphate (col. 2, lines 45-61, col. 5, lines 25-35, lines 44-60, col. 6, lines 24, 25). Therefore, it would have been obvious to use TCP in place of

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the calcium compounds of the reference in order to produce a transparent solution since the reference to Melachouris et al. teach that also using TCP will produce a transparent solution.

The particular amount of the RDA depends on what age of person one is referring to. Ranges of calcium fortification can go from 800 mg to 1200 mg a day. It is seen that the degree of fortification is within the claimed range absent a showing to the contrary (see translation labeled "Excerpts" and (abstract of Shigeru et al). Therefore, it would have been obvious to make a composition using the method of Shigeru et al.

The beverage would have been transparent and could have been used as a beverage as in claim 22 as it is assumed that an aqueous material makes up the liter as on line 7, page 1, of the translation. The beverage would have been shelf stable since the composition is the same as in claim 23. The beverage of Melachouris et al. is clear as disclosed in col. 6, lines 23-24. Therefore, it would have been obvious to make a composition as disclosed by Melachouris et al. in the process of Shigeru et al.

Nothing new is seen in storing a beverage at particular temperatures as in claims 24 -27, which would keep the calcium in suspension. It is well known that temperature affects the solubility of minerals.

Carbonation of calcium containing beverages, flavored and colored beverages are well known and nothing new is seen in their use as in claims 27-30. The beverage can be a juice or sports drink as the process has been shown. Therefore, it would have been obvious to treat the beverage as claimed.

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Nothing new is seen in the use of a particular particle size in a beverage, as the TCP would have been disclosed, absent a shown that the claimed particle size would make a difference in keeping the calcium in suspension. Therefore, it would have been obvious to treat the beverage as claimed.

The limitations of claim 36 have been disclosed above and are obvious for those reasons.

Claim 40 further requires that the RDA of calcium is a particular amount and claim 41 requires that the serving is 3 ounces, and claim 42 that it is 9 ounces. However, various RDA's are known, depending on the age of the person or his medical condition. It would have been within the skill of the ordinary worker to use enough liquid in order to present enough of the calcium compound in a palatable amount of water. Therefore, it would have been obvious to use particular RDA's and amounts of fluid.

Claims 43 and 44 further require particular calcium concentrations. However, as it is known how to solubilize TCP in an acid solution, it would have been obvious to use enough calcium in the claimed process to produce a particular amount of calcium in a beverage.

ALLOWABLE SUBJECT MATTER

Claims 37-39 are free of the prior art.

ARGUMENTS


Applicant's arguments with respect to claim 19-34, 36, 40-43 have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Helen F. Pratt whose telephone number is 571-272-1404. The examiner can normally be reached on Monday to Friday from 9:30 to 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Milton Cano, can be reached on 571-272-1398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Hp 9-4-07


HELEN PRATT
PRIMARY EXAMINER